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seq_documentation_block:
LOCUS      CNAJ4689      210 bp      mRNA      INV      05-AUG-1998
DEFINITION Centruroides noxius mRNA for cobatoxin 1, complete CDS.
ACCESSION  AJ224689
VERSION    AJ224689.1  GI:2959749
KEYWORDS   cobatoxin 1; gtIX gene; potassium channel blocking toxin.
SOURCE     Mexican scorpion.
  ORGANISM Centruroides noxius
            Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Scorpiones;
            Buthoidea; Buthidae; Centruroides.
REFERENCE  1 (bases 1 to 210)
  AUTHORS  Selisko,B.
  TITLE    Direct Submission
  JOURNAL  Submitted (27-FEB-1998) Selisko B., Molecular Recognition and
            Structural Biology, Institute of Biotechnology/UNAM, Avenida
            Universidad 2001, 62210, MEXICO
REFERENCE  2 (bases 1 to 210)
  AUTHORS  Selisko,B., Garcia,C., Becerril,B., Gomez-Lagunas,F., Garay,C. and
            Possani,L.D.
  TITLE    Cobatoxins 1 and 2 from Centruroides noxius Hoffmann constitute a
            subfamily of potassium-channel-blocking scorpion toxins
  JOURNAL  Eur. J. Biochem. 254 (3), 468-479 (1998)
  MEDLINE  98351542
FEATURES   Location/Qualifiers
     source          1. .210
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                     /sub_species="Hoffmann"
                     /db_xref="taxon:6878"
                     /clone="CngtIX"
                     /clone_lib="cDNA library"
                     /tissue_type="venom glands"
     sig_peptide     1. .84
                     /gene="gtIX"
     CDS             1. .189
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                     /codon_start=1
                     /evidence=experimental
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                     /protein_id="CAA12073.1"
                     /db_xref="GI:2959750"
                     /db_xref="SPTREMBL:O46028"
                     /translation="MEGIAKITLILLFLFVTMHTFANWNTEAAVCVYRTCDKDKCKRRG
                     YRSGKCINNACKCYPYGK"
     gene            1. .189
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     mat_peptide     85. .186
                     /gene="gtIX"
                     /function="potassium channel blocking toxin"
                     /product="cobatoxin 1"
BASE COUNT      72 a      34 c      45 g      59 t
ORIGIN

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alignment_scores:
      Quality:  115.00      Length:      57

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Ratio: 2.949 Gaps: 1  
Percent Similarity: 68.421 Percent Identity: 38.596

alignment\_block:

US-09-599-416-2 x CNAJ4689 ..

Align seg 1/1 to: CNAJ4689 from: 1 to: 210

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  1 MetSerArgIlePheThrIleIleLeuIleValPheAlaLeuAsnIleIl 17
    ::::::::::||| ||:::||:::||:::||:::||::: ::
10 ATTGCCAAAATAACACTAATCCTATTGTTTTGTTTCGTA.....ACAAT 53

17 eIleSerLeuSerAsnPheLysValGluAlaAlaGlnCysTyrSerSerA 34
   : ::::::::::||:::||:::||:::||:::||:::|| |||
54 GCATACATTCGCTAATTGGAATACCGAAGCGGCCGTGTGTGTTTATCGCA 103

34 spCysArgValLysCysAlaAlaMetGlyPheAsnSerGlyLysCysIle 50
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104 CTTGTGATAAGGATTGCAAACGTAGGGGATATAGGTCGGGAAAATGCATT 153

51 AsnSerLysCysLysCysTyr 57
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154 AACAACGCCTGCAATGTTAT 174
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